Technical data MTL fieldbus networks

September 2016 EPS F11-YK2 rev 2

CROUSE-HINDS SERIES

F11-YK2 Power conditioner and cables for temporary fieldbus network

- Built-in fieldbus power conditioning
- 5 fieldbus device ports
- 30mA current per device
- Up to 315mA total current
- Auxiliary port for expansion
- Fieldbus device cables and interface card cable
- Complete with AC power supply
- Battery-pack option

The Relcom Fieldbus Labkit (F11-YK2) is a convenient kit containing the Relcom Fieldbus Power Hub (F11) and six cables. Ideal for benchtops, labs, demonstrations, and test setups, the Power Hub is a mini fieldbus segment in a box- just add devices and a host. The supplied cables allow connection to five fieldbus devices and a National Instruments Fieldbus Interface card (USB, PCMCIA, or PCI).

A plug-in wall transformer with an input voltage range of 100-240VAC (50-60Hz) is included with the Power Hub. Adapters are supplied with the transformer for four different country power outlets (North America, Europe, UK, and Australia).

Internally the Power Hub contains a fieldbus power conditioner, two built-in terminators, and SpurGuard[™] current limiters. There are five ports for attaching devices (gray connectors), and an Auxiliary Port (black connector) for connection of additional devices. Pluggable screw terminal connectors are used on all ports for the fieldbus connections. The connectors may be secured to the Power Hub with the two retaining screws if desired.

A minimum of 30mA is available for each device port. If the current requirements of a Fieldbus device exceed the capability of the Device port, the Auxiliary Port can be used to provide additional power conditioned current. A total of 315mA can be supplied by the Power Hub. If any of the Device Ports or the Auxiliary Port is overloaded, a red Overload indicator will light.



For applications where AC power may not be available, the FCS-A11 Battery Pack may be used to supply power to the Power Hub. For more information on the FCS-A11 Battery Pack, see our datasheet EPS FCS-A11.

For convenience, the Power Hub can be mounted on standard 'top hat' 35mm DIN rail.

A typical use for the Power Hub is to configure, precommission, test, or calibrate fieldbus devices. In this case, the fieldbus device and host device (fieldbus DCS, Emerson 375 or 475, National Instruments Fieldbus Interface, etc.) are connected to the Power Hub. No other components are required to have a functioning fieldbus segment.

Note: The F11 Power Hub is not intended to be used in a permanent installation.



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SPECIFICATIONS

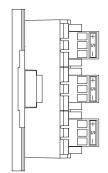
ELECTRICAL

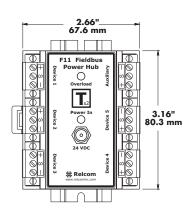
Device Port Rated Current 30mA **Total Current for all Device Ports and Auxiliary Port** 315mA max. (for specified operation) **Device Port Short Circuit Protection** Continuous protection against damage **Maximum Fieldbus Cable Length** 120 metres **Auxiliary Port Short Circuit Protection** Continuous protection against damage Wall-mounted Bulk Power Supply Input voltage: 100 - 240V AC, 50/60Hz Output voltage: 24V DC (nominal) **Fieldbus Device Cable** 1m - shielded twisted pair (x5) **National Instruments Cable** 1m - DB9 to prepared wires

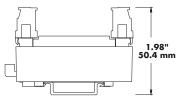
MECHANICAL

Fieldbus Connectors Six sets, pluggable screw-terminal, with two securing screws **Mounting requirements** 35mm DIN rail Wire capacity 0.14 to 2.5mm² Case material

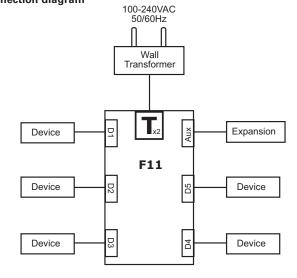
CASE DIMENSIONS







Connection diagram



ORDERING INFORMATION

Foundation[™] fieldbus H1

Lexan polycarbonate

Temperature range 0° to +50°C

146g (nominal)

PHYSICAL NETWORK

IEC 61158-2

Profibus PA

Weight

F11-YK2 Relcom Fieldbus Labkit	F11-YK2
Battery Pack (Power Hub power in the field)	FCS-A11
Heavy-duty DIN rail end stop	FCS-A06
35mm DIN rail, aluminium, 1 meter	FCS-A01

Wall Power Supply and

Interchangeable Power Outlet Adapters (included with F11)



Powering Business Worldwide

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F11 together with optional FCS-A11 Battery Pack



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